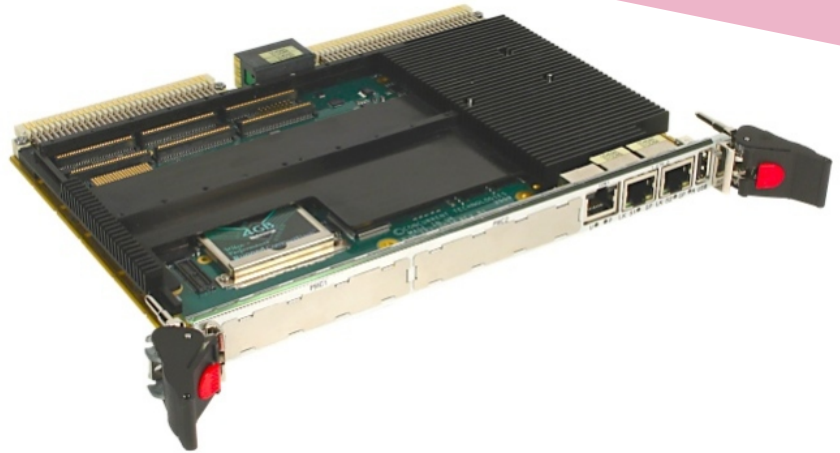


Intel® Core™ 2 Duo Processor Dual PMC VITA 41.4 Controller Rugged Air-Cooled



APPLICATIONS

The VX 511/06x-RA is a PC-compatible, high performance, ruggedized VXS/VME processor board supporting the 1.86 GHz Intel® Core™ 2 Duo processor, and the Intel® GS45 mobile class chipset with up to 6 Gbytes of DDR3-1066 SDRAM. This single slot board features two PMC (with an XMC) sites, and a variety of interfaces including a CompactFlash®

site. The VX 511/06x-RA supports VITA 41.4 dual x4 PCI Express® backplane fabric interfaces and VITA 41.6 Gigabit IEEE 802.3 (1000 Base-Bx) ports. The board is suitable for a range of applications within the defense, industrial control, telecomms, telemetry, scientific and aerospace markets. To simplify integration, many industry standard operating systems are supported.

HIGHLIGHTS

- Ruggedized controller for VXS/VME systems:
 - air cooled
 - conformally coated
- 1.86 GHz Intel® Core™ 2 Duo SL9400 processor:
 - dual-core processor
 - 1066 MHz Front Side Bus
 - 6 Mbytes L2 cache shared between cores
 - Intel® 64 Technology (64-bit computing)
- Up to 6 Gbytes of DDR3-1066 SDRAM
- 2 x SATA300 interfaces via P2 rear I/O
- CompactFlash® socket on-board
- 2 x PMC (including an XMC) module interfaces:
 - 1 x 32-bit, 33MHz PMC site
 - 1 x 32/64-bit, 33/66MHz PCI/PCI-X™ site
 - 1 x XMC module interface (x8/x4 PCI Express™)
- Graphics, keyboard and mouse interfaces
- 2 x serial channels and 3 x USB 2.0 interfaces
- 2 x 10/100/1000Mbps Ethernet channels via front panel
- 4 Mbyte BIOS SPI Flash EPROM
- Optional VXS P0 connector supporting fabric interfaces:
 - dual x4 PCI Express links, data plane (VITA 41.4)
 - dual 1000 Base-Bx ports, control plane (VITA 41.6)
- VME64/VME320 interface supporting A32/A24/A16/D64/D32/D16/D8(E0), MBLT64, 2eSST
- Watchdog timer; Long Duration Timer
- Single slot
- Optional Built-In Test (BIT) support:
 - Power-on BIT, Initiated BIT, Continuous BIT
- Ruggedized conduction-cooled version (RC-Series):
 - conduction-cooled to ANSI/VITA 30.1-2002
 - -40°C to +85°C, conformally coated
 - see separate VX 511/06x-RC datasheet
- Non-ruggedized versions:
 - see separate VX 511/06x datasheet
 - rear plug compatible with the ruggedized versions
 - useful for bench development
 - use in commercial (non-rugged) applications
- Support for Linux®, Windows® 7, Windows® Embedded Standard 7, Windows® XP, Windows® XP (64-bit), Windows® XPE, Windows® 2000, VxWorks®, QNX®, Solaris™ and LynxOS®

